IN THE SPECIFICATION

Please amend paragraphs [0045] - [0046] as follows:

[0045] In block 604, clustering engine 212 identifies spatial signature attributes for each of the targets. In accordance with the illustrated example implementation, clustering engine 212 measures one or more performance characteristics of each of the targets at each of the antennae 216. As introduced above, any of a wide variety of performance characteristics may well be used such as, for example, one or more of RSSI, SINR, SNR, BER, FER, etc. In accordance with the illustrated example implementation, clustering engine 212 measures the signal to interference and noise ratio (SINR) (eq. 2) for each of the targets for each of the K weights, and find the weight that produces the maximum SINR and assign that target to that cluster group.

$$SINR_{i,k}=\sout{f(w_i,target_k)}\ \underline{f(w_i,target_k)} \qquad (2)$$

In this regard, **[[K]]** the targets are initially grouped into K clusters.

In block 606, for each of the K clusters, clustering engine 212 assigns a new weight based on the performance characteristics of the targets within the group. According to one example implementation, for example, clustering engine 212 finds the target with the smallest SINR in the cluster and assigns a new weight generated from that user to the cluster. According to one example implementation, clustering engine 212 generates a Least-Squares weight value (eq. 3) from the signal associated with the identified user. Those skilled in the art will appreciate that the generation of a least-squares is computed by combining a signal with least squared error from a reference signal. While this weighting may not be optimal for all targets within the group, it

ensures that the target with the smallest SINR is minimally accommodated with the developed beampattern.

$$w_{i,n+1}=Rzz^{-1}Rza_{i,min} \quad (3)$$

where: $i_{min}=\min (SINR_K \in G_I)$

[0046] In block 608, once the K new weights are developed, the targets are re-grouped according to the weights that provide the best SINR performance attribute for the targets, as expressed below in eq. 4.

$$G_i=\{\textbf{\textit{~~target}}_k\ \underline{\textbf{\textit{target}}_k} \mid SINR_{i,k} \geq SINR_{j,k}, j=1,\ldots,K\} f(w_i,) \quad (4)$$